AEROBIC SUSPENDED FIXED FILM TREATMENT OF HIGH-STRENGTH TANNERY BEAMHOUSE WASTE

D. G. Bailey, M. H. Tunick, A. A. Friedman*, I. Chang**, and J. E. Cooper

Eastern Regional Research Center***
Philadelphia, Pennsylvania 19118

ABSTRACT FOR LIST OF PUBLICATIONS AND PATENTS

An aerobic suspended fixed film pilot plant reactor was used to treat a difficult industrial waste from a tannery beamhouse. Removal of 72% of the COD was obtained at loading rates as high as 1,300 pounds per 1,000 cubic feet per day. Increasing the reactor recycle rate improved the removal. Total Kjeldahl nitrogen removal varied but was generally between 50 and 75%. Sulfide removal was over 98%, regardless of the concentration in the influent. These results suggest that the process may have applications for locations which must treat high-strength waste but have limited space for this purpose.

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* Associate Professor, Syracuse University, Dept. of Civil Engineering, Syracuse, NY.

** Professor, Cheyney State College, Dept. of Chemistry, Cheyney, PA.

*** Agricultural Research, Science and Education Administration, U.S. Department of Agriculture.